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**PRELIMINARY ASSESSMENT/
VISUAL SITE INSPECTION**

**VAN WATERS & ROGERS, INC.
BEDFORD HEIGHTS, OHIO
OHD 071 107 791**

FINAL REPORT

US EPA RECORDS CENTER REGION 5



509058

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460**

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- A EPA PRELIMINARY ASSESSMENT FORM 2070-12
- B VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS
- C VISUAL SITE INSPECTION FIELD NOTES

RELEASED
DATE 4/22/99
RIN # 639-95
INITIALS WV

EXECUTIVE SUMMARY

ENFORCEMENT
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PRC Environmental Management, Inc. (PRC), performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) at the Van Waters & Rogers, Inc. (VW&R), facility in Bedford Heights, Cuyahoga County, Ohio. This summary highlights the results of the PA/VSI and the potential for releases of hazardous wastes or hazardous constituents from the SWMUs identified. No areas of concern (AOC) were identified. A completed U.S. Environmental Protection Agency (EPA) Preliminary Assessment Form (EPA Form 2070-12) is included in Attachment A to assist in prioritizing RCRA facilities for corrective action.

The 2.351-acre facility was first occupied by the McKesson Chemical Company (McKesson) in March 1963. McKesson operated until November 1986, when VW&R purchased McKesson and the facility. As McKesson had done previously, VW&R operated the facility as a chemical warehouse and distribution center, and temporary hazardous waste storage facility. In December 1987, VW&R vacated the facility. Currently, VW&R leases the facility to Vidmar, Inc. (Vidmar). Vidmar uses the facility as a furniture warehouse and distribution center and has leased the facility since June 1992. No hazardous wastes are generated by Vidmar's activities.

While occupying the facility, McKesson and VW&R operated a Hazardous Waste Container Storage Area (CSA) (SWMU 1) that was used to store F-solvent wastes. This unit operated under interim status until federal and state Part B permits were issued in 1983 and 1985, respectively. Its permitted capacity was 6,050 gallons or 110 55-gallon drums. In October 1989, VW&R submitted closure certification for this unit. However, the Ohio Environmental Protection Agency (OEPA) did not approve this closure. Closure activities at the facility are ongoing.

The PA/VSI identified the following two SWMUs and no AOCs at the facility:

1. Hazardous Waste CSA
2. Elementary Neutralization Unit

The current potential for release from the facility's SWMUs to all environmental media is low. The facility currently does not generate or manage wastes containing hazardous constituents. No releases from the Hazardous Waste CSA (SWMU 1) have been documented. However, analysis of soil samples collected during closure detected xylene [0.015 milligrams per kilograms (mg/kg)]; tetrachloroethene (0.018 mg/kg); and 1,1,1-trichloroethane (0.018 mg/kg). One release from the Elementary Neutralization Unit (SWMU 2) has been documented. In 1982, about 40 gallons of

neutralized drum rinsate was released to an unspecified media (possibly soil). Because of the nature of the wastes managed by this unit, it is unlikely that material released contained hazardous constituents.

Ground water is not used as a source of drinking water for the area. Bedford Heights water is obtained from Lake Erie and is supplied by the Cleveland Water Department. The nearest residence is located about 0.5 mile from the facility. Access is restricted by a chain-link fence with three strands of barbed wire. This fence completely surrounds the facility.

The nearest surface water, an unnamed creek, is located about 0.25 mile south of the facility and is used for drainage and possibly recreational purposes. This creek flows south to Tinker Creek, which ultimately discharges to the Cuyahoga River and Lake Erie. Placustrine wetland areas are located between 0.5 and 1 mile northwest and east of the facility.

PRC recommends that closure activities continue for the Hazardous Waste CSA (SWMU 1). As part of these closure activities, additional soil sampling at areas surrounding the unit may be required. No further action is recommended for the Elementary Neutralization Unit (SWMU 2).

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1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. C05087 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has usually exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading or unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release of hazardous waste or constituents to the environment has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where a strong possibility exists that such a release might occur in the future.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility
- Obtain information on the operational history of the facility
- Obtain information on releases from any units at the facility
- Identify data gaps and other informational needs to be filled during the VSI

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA
- Identify releases not discovered during the PA
- Provide a specific description of the environmental setting
- Provide information on release pathways and the potential for releases to each medium
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases

The VSI includes interviewing appropriate facility staff; inspecting the entire facility to identify all SWMUs and AOCs; photographing all visible SWMUs; identifying evidence of releases; making a preliminary selection of potential sampling parameters and locations, if needed; and obtaining additional information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the Van Waters & Rogers, Inc. (VW&R), facility (EPA Identification No. OHD 071 107 791) in Bedford Heights, Cuyahoga County, Ohio. The PA was completed on June 25, 1992. PRC gathered and reviewed information from the Ohio Environmental Protection Agency (OEPA) and from EPA Region 5 RCRA files. The VSI was conducted on July 8, 1992. It included interviews with facility representatives and a walk-through inspection of the facility. PRC identified two SWMUs and no AOCs at the facility.

PRC completed EPA Form 2070-12 using information gathered during the PA/VSI. This form is included as attachment A. The VSI is summarized and three inspection photographs are included in Attachment B. Field notes from the VSI are included in Attachment C.

2.0 FACILITY DESCRIPTION

This section describes the facility's location; past and present operations; waste generating processes and waste management practices; a history of documented releases; regulatory history, environmental setting; and receptors.

2.1 FACILITY LOCATION

VW&R is located at 26601 Richmond Road, Bedford Heights, Cuyahoga County, Ohio (latitude 41°24'45"N; longitude 81°29'01"W). The facility occupies 2.531 acres of an industrial area about 4 miles west of Cleveland, Ohio. The location of the VW&R facility is shown in Figure 1.

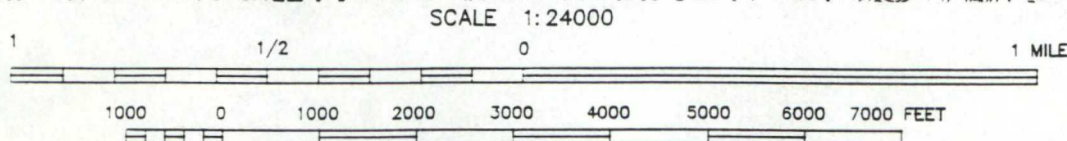
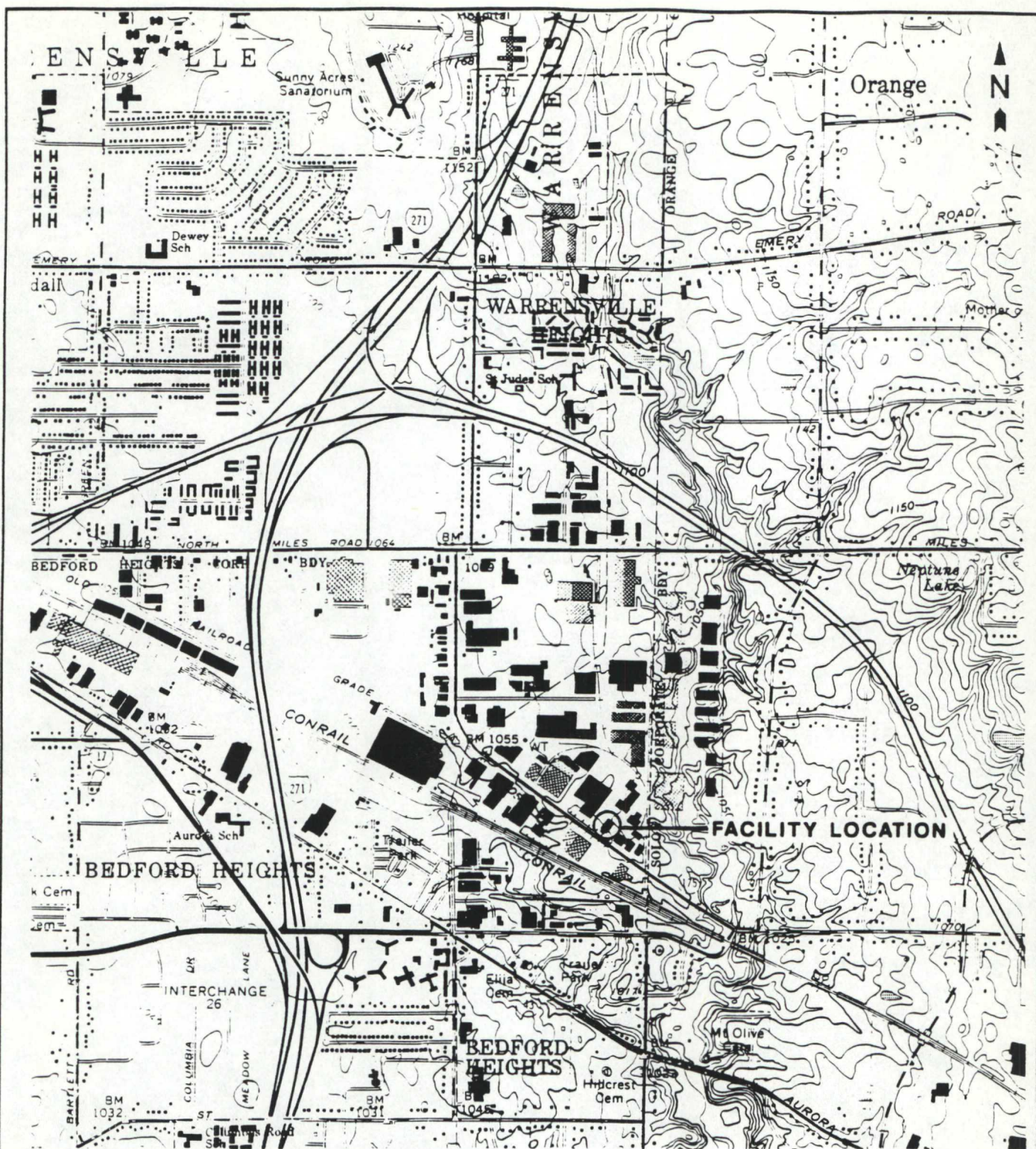
The VW&R facility is bordered by B&B Wood Products, Inc., and The Racquet Club East to the northeast; Zellerbach, a Mead Company, to the southeast; Earle M. Jorgensen Company to the southwest across Richmond Road; and Joseph Industries, Inc., to the northwest. Access to the VW&R facility is restricted by a chain-link fence with three strands of barbed wire. This fence completely surrounds the facility.

2.2 FACILITY OPERATIONS

In March 1963, the facility was first occupied by the McKesson Chemical Company (McKesson). McKesson operated the facility as a distributor of industrial chemicals until November 1986.

In November 1986, VW&R purchased McKesson and the Bedford Heights facility. At that time, the facility's Part B permit was transferred to VW&R, authorizing VW&R to operate the Hazardous Waste Container Storage Area (CSA) (SWMU 1). VW&R is a wholly-owned subsidiary of the Univar Corporation, based in Kirkland, Washington.

As McKesson had done previously, VW&R operated the facility as a chemical warehouse and distribution center, and temporary hazardous waste storage facility. About 25 people were employed at the facility. The facility's masonry, steel-framed main building has an area of about 20,500 square feet. About 2,700 square feet of the building was used for office space. The remaining 17,800 square feet was used as a warehouse to store raw chemicals in containers. Raw chemicals were also stored in bulk in one of two tank farms: (1) the corrosive tank farm and (2) the solvent tank farm (see Photograph Nos. 2 and 3).



SCALE: 1" = 2,000'



QUADRANGLE LOCATION

SOURCE: MODIFIED FROM USGS, 1984

VAN WATERS & ROGERS, INC.
BEDFORD HEIGHTS, OHIO

FIGURE 1
FACILITY LOCATION

PRC ENVIRONMENTAL MANAGEMENT, INC.

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Raw chemicals brought to the facility were transferred from tanker truck into the product tanks. The chemicals were then piped from the product tanks to repack buildings at each tank farm. Containers, typically 55-gallon drums, were filled in these buildings. These containers were then stored in the warehouse until they were sold to various customers for use in a variety of manufacturing processes. An abandoned railroad spur at the facility indicates that at one time, bulk chemicals may have also been delivered via rail car. Tanks were constructed of steel and located outdoors within concrete-diked tank farms. The base of the tank farms consisted of gravel and crushed limestone. Tanks in the corrosive tank farm were supported by tank saddles. Tanks in the solvent tank farm were positioned on concrete pads. Tank contents and volumes are shown in Figure 2. All product tanks were emptied in 1987, triple rinsed, removed, and destroyed by a scrap company in 1990 (VW&R, 1992).

As the facility delivered product drums to its customers, empty product drums and drums filled with hazardous waste were collected from off-site generators and taken back to the facility. Empty drums containing corrosive residue were rinsed in the corrosive repack building and refilled with product. Corrosive rinsate was piped to the Elementary Neutralization Unit (SWMU 2) and neutralized. Drums that were filled with non-corrosive, hazardous waste were stored at the facility's Hazardous Waste CSA (SWMU 1). The facility did not consolidate waste streams. When a full truckload of containers accumulated, VW&R transported the drums to an off-site treatment, storage, or disposal (TSD) facility. No manufacturing operations occurred at the VW&R facility. Solid wastes generated and managed at the VW&R facility are discussed in detail in Section 2.3.

Over time, the inventory and personnel of the Bedford Heights facility were moved to the VW&R facility in Twinsburg, Ohio. In December 1987, VW&R completely vacated the Bedford Heights facility. Currently, VW&R leases the facility to Vidmar, Inc. (Vidmar). Vidmar operates the facility as a furniture warehouse and distribution center and has leased the facility since June 1992. No hazardous wastes are generated by Vidmar's activities.

2.3 WASTE GENERATION AND MANAGEMENT

Hazardous wastes managed at the facility included spent solvents (F001, F002, F003, and F005) and ignitable (D001) wastes. These wastes were generated off site and temporarily stored at the VW&R facility. Shipments of spent solvents included chlorinated fluorocarbons, xylene, acetone, methyl ethyl ketone, and benzene. Ignitable wastes included isopropanol, ethanol, glycol ethers, and some spent solvents. These wastes were generated by the pharmaceutical, ink and paint formulation, plastics, electronics, and paint stripping industries. Hazardous wastes were received in 55-gallon steel drums and stored in the Hazardous Waste CSA (SWMU 1). Drums of

waste remained in SWMU 1 until truckload quantities, approximately 70 drums, accumulated. VW&R then transported the wastes to various TSD facilities, including Chemical Waste Management; EMPAK, Inc.; Rollins Environmental Services; Romic Chemical; and Systech Environmental Corporation.

The facility also rinsed empty drums containing corrosive material. Rinsate from these operations was either caustic or acidic, depending on the material contained in the drums being rinsed. Because the aqueous rinsate entering the unit was dilute, it typically did not meet the definition of corrosivity set forth in 40 CFR 261.22. However, it is possible that the material may have occasionally exhibited the corrosive characteristic (D002). Rinsate was accumulated in the Elementary Neutralization Unit (SWMU 2) until quantities were sufficient for batch neutralization. The rinsate was then tested for pH and neutralized accordingly. The neutralized rinsate was pumped from SWMU 2 to the sanitary sewer. The sanitary sewer connection was located at the corner of the corrosive repack building.

The facility's SWMUs are identified in Table 1. The facility layout, including SWMUs, is shown in Figure 2. The facility's waste streams are summarized in Table 2.

2.4 HISTORY OF DOCUMENTED RELEASES

This section discusses the history of documented releases to ground water, surface water, air, and on-site soils at the facility.

In 1982, the polyethylene liner within the concrete Elementary Neutralization Unit (SWMU 2) slipped down the side of the unit. Documentation indicates that 40 gallons of neutralized drum rinsate was released. It is unclear what area or environmental media were impacted by this release, but the release may have affected the on-site soils beneath the gravel of the corrosive tank farm. Apparently, residue remaining within the concrete pit was pumped out as quickly as possible and the liner was pulled up (McKesson, 1986). No further details regarding this release were available.

PRC found no other documentation of releases from the facility. However, analysis of samples collected as part of closure activities at the Hazardous Waste CSA (SWMU 1) detected xylene [0.015 milligrams per kilograms (mg/kg)]; tetrachloroethene (0.018 mg/kg); and 1,1,1-trichloroethane (0.018 mg/kg) directly beneath the unit (Geraghty and Miller, Inc., 1992). Closure activities at the facility are ongoing.

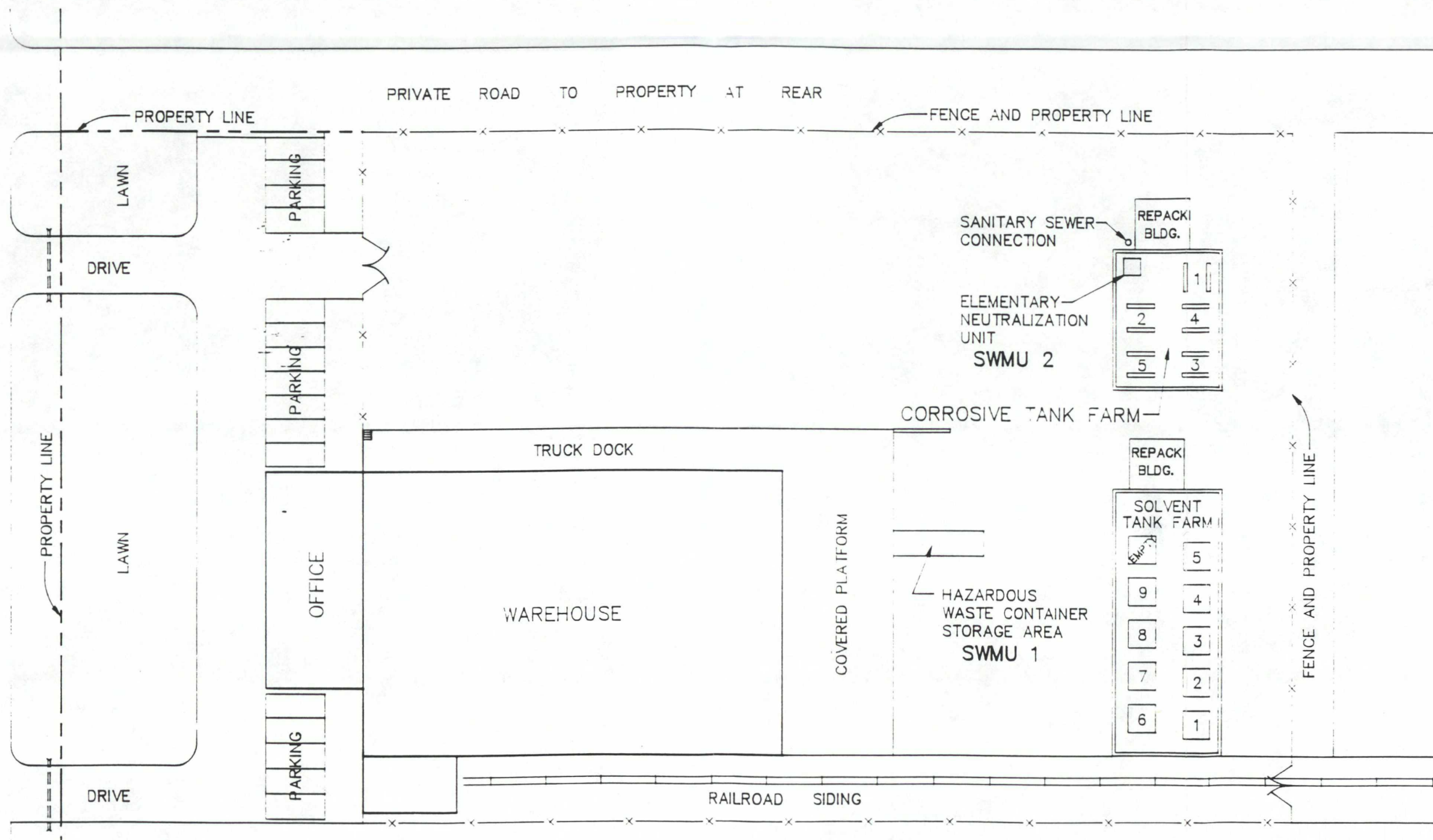
TABLE 1
SOLID WASTE MANAGEMENT UNITS

<u>SWMU Number</u>	<u>SWMU Name</u>	<u>RCRA Hazardous Waste Management Unit^a</u>	<u>Status</u>
1	Hazardous Waste CSA	Yes	Inactive; undergoing RCRA closure
2	Elementary Neutralization Unit	No	Inactive

Note:

^a A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.

RICHMOND ROAD



CORROSIVE PRODUCT STORAGE TANKS		
TANK NUMBER	PRODUCT	VOLUME (gallons)
1	AMMONIA	10,000
2	HYDROCHLORIC ACID	10,000
3	SULFURIC ACID	10,000
4	NITRIC ACID	9,000
5	HYDROGEN PEROXIDE	7,200

SOLVENT PRODUCT STORAGE TANKS		
TANK NUMBER	PRODUCT	VOLUME (gallons)
1	ETHYLENE GLYCOL	10,000
2	BUTYL CELLULOSE	10,000
3	ISOPROPANOL	10,000
4	METHYL ETHYL KETONE	10,000
5	XYLENE	10,000
6	ETHYLENE GLYCOL	10,000
7	TRICHLOROETHENE	10,000
8	1,1,1-TRICHLOROETHANE	10,000
9	TOLUENE	10,000

40' 0 20' 40'
SCALE: 1" = 40'

VAN WATERS & ROGERS, INC.
BEDFORD HEIGHTS, OHIO

FIGURE 2
FACILITY LAYOUT

PRC ENVIRONMENTAL MANAGEMENT, INC.

TABLE 2
SOLID WASTES

<u>Waste/EPA Waste Code</u>	<u>Source</u>	<u>Solid Waste Management Unit</u>
Spent Solvents/F001, F002, F003, and F005	Off-site generators	1
Ignitable Wastes/D001	Off-site generators	1
Drum Rinsate/D002	Empty drum rinsing	2

2.5

REGULATORY HISTORY

In August 1980, McKesson submitted a Notification of Hazardous Waste Activity (notification) as a generator and treatment facility (McKesson, 1980a). In November 1980, McKesson submitted a subsequent notification as a generator, treatment, storage, and transporter facility for the following wastes: F001, F003, F005, U002, U226, U122, U228, U154, U159, U210, U220, U239, and D002 (McKesson, 1980b). Also in November 1980, McKesson submitted a Part A permit application (Part A) listing container storage (S01) of 550 gallons and tank treatment (T01) of 200 gallons per day (McKesson, 1980c). In September 1981, McKesson submitted a revised Part A that deleted the T01 capacity and increased the S01 capacity to 6,600 gallons. The T01 capacity was deleted because the unit was a RCRA-exempt elementary neutralization unit. Waste codes specified for the S01 unit included F001, F002, F003, F004, and F005 (McKesson, 1981).

EPA issued McKesson a Part B permit effective September 29, 1983 (McKesson, 1983). Subsequently, OEPA issued McKesson Hazardous Waste Facility and Operation Permit No. 02-18-0628 effective July 18, 1985, and expiring July 18, 1990 (McKesson, 1985). However, these permits specified only 6,050 gallons of S01 capacity at the Hazardous Waste CSA (SWMU 1).

In November 1986, VW&R purchased McKesson. After this purchase, the facility submitted a subsequent Notification and revised Part A, notifying EPA and OEPA of its change in ownership, change in name to VW&R, and change in facility contact. The revised Part A specified 6,600 gallons of S01 capacity (VW&R 1986a; and 1986b).

In April 1988, VW&R submitted a closure plan to OEPA for the Hazardous Waste CSA (SWMU 1). At that time, the facility had an approved OEPA Part B permit that included a different closure plan. In October 1988, VW&R requested that the April 1988 closure plan be disregarded and that Part B closure begin according to the closure plan approved in the Part B permit. OEPA accepted this request as notification of closure. In October 1989, VW&R submitted a certification of final closure. VW&R had vacated the facility 1 month earlier. After a November 1991 post-closure inspection of the facility, OEPA determined that VW&R failed to provide documentation necessary to demonstrate that the facility was closed in a manner that prevents threats to human health and the environment. Therefore, OEPA requested that at least two additional core samples be analyzed for all appropriate organic constituents (OEPA, 1991). Subsequent analysis of core samples detected xylene (0.015 mg/kg); tetrachloroethene (0.018 mg/kg); and 1,1,1-trichloroethane (0.018 mg/kg) (Geraghty and Miller, Inc., 1992). Closure activities at VW&R are ongoing.

In the past, the facility has been inspected for RCRA compliance. Violations noted during these inspections pertained to recordkeeping requirements (OEPA, 1982, 1985, 1987, and 1988). The facility did not have any air permits or have a National Pollutant Discharge Elimination System (NPDES) permit.

2.6 ENVIRONMENTAL SETTING

This section describes the climate, flood plain and surface water, geology and soils, and ground water in the vicinity of the facility.

2.6.1 Climate

The climate in Cuyahoga County is continental with an average daily temperature of 50°F. The lowest average daily temperature is 26°F in January, and the highest average daily temperature is 72°F in July. In summer, northern areas near Lake Erie are markedly colder than the rest of the county. The average year-round relative humidity in the afternoon is about 60 percent. The total average annual precipitation for the county is 35 inches. The mean annual lake evaporation is about 31 inches (USGS, 1978). Precipitation is well distributed during the year. Sixty percent of the total annual precipitation usually falls from April to September. Snow squalls are frequent from late fall through winter, and total snowfall is normally heavy. The 1-year, 24-hour maximum rainfall is 4.0 inches. The prevailing wind is from the southwest. Average wind speed is highest in January at 13 miles per hour from the southwest (USSCS, 1980).

2.6.2 Flood Plain and Surface Water

Surface waters at and near the facility drain primarily to a combined sewer system operated by the City of Bedford Heights. The nearest surface water, an unnamed creek, is located approximately 0.25 mile south of the facility and is used for drainage and possibly recreational purposes. This creek flows south to Tinkers Creek, which ultimately discharges to the Cuyahoga River and Lake Erie (USGS, 1984). Lake Erie is located about 10 miles northwest of the facility. The VW&R facility is not located in a 100-year flood plain (FEMA, 1980).

2.6.3 Geology and Soils

Limited site-specific geology and soil information is available; therefore, regional information is presented.

Two general classes of deposits exist in Cuyahoga County: glacially derived, unconsolidated deposits of Quaternary age and consolidated sandstone and shale of Paleozoic era. Glacial outwash deposits of sand and gravel are associated with the glacial deposits. These deposits are located predominately in valleys and on valley sides. The majority of the glacial deposits are heterogenous, and they may contain discontinuous lenses and thin sheets of sand and gravel (White, 1982). Glacial deposits in the area range in thickness from 0 to 300 feet. South of the Lake Plain area, the uppermost unit, the Hiram Till, is exposed. The Hiram Till is a clay till and ranges in thickness from 0 to more than 30 feet. The Kent-Navarre Till underlies the previous unit. It is composed of clayey sand and silt and ranges in thickness from 0 to 100 feet. The last Wisconsinan age unconsolidated unit in the area is the Mogadore-Millbrook Till, which is also composed of clayey sand and silt (Banks and Feldmann, 1970; White, 1982). Pre-Wisconsinan tills and outwash deposits unconformably overlie the bedrock in deep depressional surfaces, such as buried bedrock valleys. The Pre-Wisconsinan deposits are discontinuous across northeastern Ohio. These deposits are more than 60 feet thick in parts of Cuyahoga County and provide large quantities of high-grade gravel in the Mill Creek valley (White, 1982).

The bedrock units dip slightly to the south and south-southeast at about 20 feet per mile (Leverett and Van Horn, 1931). Devonian age bedrock is exposed in the subcrop and along river valleys near Lake Erie. Bedrock units become progressively younger to the south. The uppermost bedrock unit is the Sharon Conglomerate of the Pottsville Group of Pennsylvanian age. It is approximately 0 to 150 feet thick. Underlying this unit is the Cuyahoga Group of Mississippian age, which is approximately 160 to 425 feet thick and is composed primarily of blue to gray shale, with alternating beds of sandy shale and sandstone. Underlying the Cuyahoga Group is the Berea Sandstone, which ranges in thickness from 5 to 150 feet. The Berea Sandstone overlies the Bedford Shale, which is composed of firm-to-soft gray siliceous shale, ranging in thickness from 50 to 90 feet. This formation overlies the Ohio Shale of Devonian age, which is more than 400 feet thick. The Ohio Shale formation is predominately black carboniferous shale, with beds of greenish-gray shale. Underlying this unit is a series of older Paleozoic era limestones, sandstones, and shales (Leverett and Van Horn, 1931; Banks and Feldmann, 1970; White, 1982).

The soils in the area around the site are of the Urban Land - Elnora - Jimtown association. This soil association is characterized by broad flats on lake plains, terraces, and beach ridges. The soils are nearly level, but there is some undulation. This association is about 45 percent Urban land, 15 percent Elnora soils, 10 percent Jimtown soils, and 30 percent soils of minor extent.

Urban land consists of areas that are covered by streets, parking lots, buildings, and other structures that so obscure or alter the soils that identification is not feasible. Elnora soils are nearly level, moderately well drained, and coarse-textured; they are on lake plains. Elnora soils have moderately rapid or rapid permeability. They have a seasonal high water table at a depth of 18 to 24 inches. Jimtown soils are nearly level, somewhat poorly drained, and medium-textured. These soils are on terraces and beach ridges. They have moderate permeability and a seasonal high water table at a depth of 12 to 30 inches. Minor soils in this association are the Chili and Bogart soils on outwash and stream terraces. The Glenford and the Fitchville soils are on terraces and in basins of former glacial lakes. The Haskins soils are on terraces and beach ridges (USSCS, 1980).

2.6.4 Ground Water

Site-specific ground-water information is limited; therefore, regional information is presented. The use of ground water in the county is limited to water-bearing formations within the bedrock, alluvial, and glacial outwash deposits found mostly in valleys, and, to a lesser extent, sand and gravel lenses and sheets associated with the glacial drift. Existing valleys generally contain thick deposits of sand and gravel from glacial outwash. Wells in these deposits can yield up to 500 gallons per minute. The glacial outwash has an estimated hydraulic conductivity of 10^{-3} to 10^{-1} centimeters per second (cm/sec) (Bloyd, 1974; Fetter, 1988).

The glacial deposits also may be a source of ground water where the deposits overlie the Ohio Shale, especially where the drift is thick and contains a large percentage of sand (Leverett and Van Horn, 1931). The hydraulic conductivity for such aquifers is estimated to be less than 10^{-3} cm/sec (Bloyd, 1974). Water-bearing formations within the Paleozoic bedrock include the Sharon Conglomerate and Berea Sandstone. Both aquifers have an estimated hydraulic conductivity 10^{-3} to 10^{-8} cm/sec; wells in these units can yield from 25 to 100 gpm (Bloyd, 1974; Freeze and Cherry, 1979). Generally, local ground-water flow in shallow glacial aquifers is controlled by surface topography and discharges into nearby rivers or lakes. The regional ground-water flow in the bedrock most likely is toward the Appalachian Basin to the south (Bloyd, 1974).

Local well logs indicate the depth to shallow ground water is 28 to 40 feet below ground surface in a sand and gravel aquifer beneath the clay layer (ODNR, 1951; 1953; and 1956).

The VW&R facility occupies 2.531 acres in Bedford Heights, Ohio, about 4 miles west of Cleveland. Bedford Heights has a population of about 12,171 (East Ohio Gas Company, 1992). When operating, VW&R employed about 25 people. The nearest residence is located about 0.5 mile from the facility. St. Judes School is located about 1 mile north of the facility.

The VW&R facility is bordered by B&B Wood Products, Inc., and The Racquet Club East to the northeast; Zellerbach, a Mead Company, to the southeast; Earle M. Jorgensen Company to the southwest across Richmond Road; and Joseph Industries, Inc., to the northwest. Access to the VW&R facility is restricted by a chain-link fence with three strands of barbed wire. This fence completely surrounds the facility.

Drinking water for the City of Bedford Heights is obtained from Lake Erie and supplied by the Cleveland Water Department. Ground-water wells located in the vicinity of the facility are inactive (PRC, 1992). In the past, these wells may have been used for drinking water. The nearest surface water, an unnamed creek, is located approximately 0.25 mile south of the facility and is used for drainage and possibly recreational purposes. This creek flows south to Tinkers Creek, which ultimately discharges to the Cuyahoga River and Lake Erie (USGS, 1984). Placustrine wetland areas are located between 0.5 and 1 mile northwest and east of the facility (U.S. DOI, 1977).

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the two SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and PRC's observations. Figure 2 shows the SWMU locations.

SWMU 1

Hazardous Waste CSA

Unit Description:

This unit consisted of an outdoor concrete storage pad adjacent to the northeast wall of the facility's warehouse. Containers of hazardous waste, typically 55-gallon steel drums, were stored in this area. The storage area was distinguished from the concrete area surrounding it by yellow lines painted on the concrete. The unit measured 30 feet by 10 feet for a total of 300 square feet. The permitted capacity of this unit was 6,050 gallons or 110 55-gallon containers. According to facility representatives, 70 to 80 containers were typically stored here. The area was not bermed.

Date of Startup:

This unit began operation in 1981.

Date of Closure:

This unit became inactive in 1987. VW&R submitted a certification of closure of the unit in October 1988; however, OEPA did not approve the closure. Closure activities are ongoing.

Wastes Managed:

This unit was used to manage containers of spent solvent (F001, F002, F003, and F005) and ignitable wastes (D001). These containers were later shipped off site to various permitted TSD facilities.

Release Controls:

Other than the containment provided by the containers of waste and the concrete pad, this unit had no form of release controls. The area was not bermed. No drains were located in the vicinity of this unit.

History of Documented Releases:

No releases from this unit have been documented. However, analysis of soil samples collected as part of closure activities

detected xylene (0.015 mg/kg); tetrachloroethene (0.018 mg/kg); and 1,1,1-trichloroethane (0.018 mg/kg) (Geraghty and Miller, Inc., 1992).

Observations: This unit was inactive at the time of the VSI. PRC noted several large cracks in the unit's concrete pad and locations of boreholes associated with closure sampling activities. The concrete area was sloped slightly downward to the northwest. No evidence of release was noted (see Photograph No. 1).

SWMU 2

Elementary Neutralization Unit

Unit Description: This unit consisted of an outdoor, inground concrete vault located within the corrosive tank farm, just south of the corrosive repack building. The unit measured 5 feet wide by 5 feet long by 6 feet deep and was lined with a polyethylene liner.

Date of Startup: The exact startup date for this unit is unknown. Facility representatives assume that this unit began operating in 1963, when McKesson first occupied the facility.

Date of Closure: This unit ceased operation in 1987 and was removed in 1990.

Wastes Managed: This unit managed rinsate from drum washing operations. Residue washed from the drums was either caustic or acidic, depending on the material contained in the drums being rinsed. Because the aqueous rinsate entering the unit was dilute, it typically did not meet the definition of corrosivity set forth in 40 CFR 261.22. However, it is possible that the material may have occasionally exhibited the corrosive characteristic (D002). Rinsate was accumulated in this unit until quantities were sufficient for batch neutralization. The rinsate was then tested for pH and neutralized accordingly. The neutralized rinsate was pumped to the sanitary sewer located at the northeast corner of the corrosive repack building.

Release Controls: This unit was constructed of concrete and lined with a polyethylene liner but had no other form of release controls.

**History of
Documented Releases:**

In 1982, the polyethylene liner within this unit slipped down the side of the unit, releasing about 40 gallons of neutralized drum rinsate. It is unclear what area or environmental media were impacted by this release, but it is likely that the release affected the on-site soils. Apparently, residue remaining within the concrete pit was pumped out as quickly as possible and the liner was pulled up (McKesson, 1986).

Observations:

PRC observed that this unit had been removed, and the area was filled with gravel. Vegetation was growing within this gravel area. No evidence of release was noted (see Photograph No. 3).

4.0 AREAS OF CONCERN

PRC identified no AOCs during the PA/VSI. No releases from the facility's product storage areas have been documented.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified two SWMUs and no AOCs at the VW&R facility. Background information on the facility's location; operations; waste generating processes and waste management practices; history of documented releases; regulatory history; environmental setting; and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is presented in Section 3.0. Following are PRC's conclusions and recommendations for each SWMU. Table 3, at the end of this section, summarizes the SWMUs at the facility and the recommended further actions.

SWMU 1

Hazardous Waste CSA

Conclusions:

This unit was inactive at the time of the VSI; therefore, the current potential for further release to all environmental media is low. This unit consisted of an outdoor concrete storage pad for containers of hazardous solvent (F001, F002, F003, and F005) and ignitable wastes (D001). This unit was located adjacent to the northeast wall of the facility's warehouse. Because the area was not bermed, potential for release to on-site soils while the facility was active was moderate. VW&R submitted a certification of closure of the unit in October 1988; however, OEPA did not approve the closure. Analysis of soil samples collected as part of closure activities detected xylene; tetrachloroethene; and 1,1,1-trichloroethane beneath the unit at levels ranging from 0.015 to 0.018 mg/kg. Closure activities are ongoing.

Recommendations:

PRC recommends closure activities continue as scheduled to address any contamination from past releases that may have occurred. As part of closure activities, additional soil sampling at areas surrounding the unit may be required.

SWMU 2

Elementary Neutralization Unit

Conclusions:

At the time of the VSI, this unit was inactive and had been removed. Therefore, the current potential for release to all environmental media is low. This unit was constructed of concrete and lined with a polyethylene liner but had no other form of release controls. In 1982, the polyethylene liner within this unit slipped down the side of the unit, releasing about

40 gallons of neutralized drum rinsate. It is unclear what area or environmental media were impacted by this release, but the release may have affected on-site soils beneath the gravel of the corrosive tank farm. Apparently, neutralized residue remaining within the concrete pit was pumped out to the sewer as quickly as possible and the liner was pulled up. Due to the nature of the wastes managed by this unit, material released was not likely to contain hazardous constituents.

Recommendations: PRC recommends no further action at this time.

RELEASED
DATE 4/22/99
RIN # 639-99
INITIALS WV

ENFORCEMENT
CONFIDENTIAL

ENFORCEMENT
CONFIDENTIAL

TABLE 3
SWMU SUMMARY

<u>SWMU</u>	<u>Dates of Operation</u>	<u>Evidence of Release</u>	<u>Recommended Further Action</u>
1. Hazardous Waste CSA	1981 to 1987	None	Continue closure activities; additional soil sampling
2. Elementary Neutralization Unit	1963 to 1987	1982 release of neutralized drum rinsate	No further action

RELEASED
DATE 6/22/99
RIN # 639-99
INITIALS AV

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ATTACHMENT A
EPA PRELIMINARY ASSESSMENT FORM 2070-12



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE
OH

07 SITE NUMBER
D 071 107 791

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)
Van Waters & Rogers, Inc.

02 STREET, ROUTE NO. OR SPECIFIC LOCATION IDENTIFIER
26601 Richmond Road

03 CITY
Bedford Heights

04 STATE
OH

05 ZIP CODE
44146

06 COUNTY
Cuyahoga

07 COUNTY
CODE
035

08 CONG
DIST

09 COORDINATES: LATITUDE
41° 24' 45" N

LONGITUDE
81° 29' 01" W

10 DIRECTIONS TO SITE (Starting from nearest public road)

U.S. 271 south from Cleveland to Rockside Road. Rockside Road east to Richmond Road. Richmond Road north about 0.5 mile to 26601 Richmond Road.

III. RESPONSIBLE PARTIES

01 OWNER (if known)
Univar Corporation

02 STREET (Business, mailing, residential)
1600 North Building

03 CITY
Seattle

04 STATE
WA

05 ZIP CODE
98104

06 TELEPHONE NUMBER
206/447-5909

07 OPERATOR (If known and different from owner)
Van Waters & Rogers, Inc. (leasing to Vidmar, Inc.)

08 STREET (Business, mailing, residential)
600 Hunter Drive

09 CITY
Oak Brook

10 STATE
IL

11 ZIP CODE
60521

12 TELEPHONE NUMBER
708/573-4340

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE

☐ B. FEDERAL:

(Agency Name)

☐ C. STATE

☐ D. COUNTY

☐ E. MUNICIPAL

☐ F. OTHER

(Specify)

☐ G. UNKNOWN

14. OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☒ A. RCRA 3010 DATE RECEIVED: 08/14/80
MONTH DAY YEAR

☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: / /
MONTH DAY YEAR

☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

BY (Check all that apply)

☒ YES
☐ NO

DATE 07/08/92

☐ A. EPA

☒ B. EPA CONTRACTOR

☐ C. STATE

☐ D. OTHER CONTRACTOR

☐ E. LOCAL HEALTH OFFICIAL

☐ F. OTHER:

(Specify)

CONTRACTOR NAME(S): PRC Environmental Management, Inc. (PRC)

02 SITE STATUS (Check one)

☐ A. ACTIVE

☒ B. INACTIVE

☐ C. UNKNOWN

03 YEARS OF OPERATION

1963 : 1987
BEGINNING YEAR ENDING YEAR

☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

The facility formerly operated as a chemical distributor for solvents and corrosives. Hazardous wastes were managed in containers and included spent solvents (F001, F002, F003, and F005) and ignitables (D001).

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

The facility is currently inactive and leased as a warehouse to Vidmar, Inc., a furniture distributor. Soil contamination has been documented at the facility's Hazardous Waste Container Storage Area. The potential for further release to all environmental media is low.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents.)

☐ A. HIGH
(Inspection required promptly)

☐ B. MEDIUM
(Inspection required)

☒ C. LOW
(Inspect on time-available basis)

☐ D. NONE
(No further action needed; complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT
Kevin Pierard

02 OF (Agency/Organization)
U.S. EPA

03 TELEPHONE NUMBER
(312) 886-4448

04 PERSON RESPONSIBLE FOR ASSESSMENT
Jack Brunner

05 AGENCY

06 ORGANIZATION
PRC

07 TELEPHONE NUMBER
(312) 856-8700

08 DATE
06/ 25/ 92
MONTH DAY YEAR

ATTACHMENT B
VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

VISUAL SITE INSPECTION SUMMARY

Van Waters & Rogers, Inc.
26601 Richmond Road
Bedford Heights, Ohio 44146
OHD 071 107 791

Date: July 8, 1992

Primary Facility Representative: James Hooper, Regional Regulatory Manager

Representative Telephone No.: (708) 573-4340

Additional Facility Representatives: Russ Karney, Area Operations Manager

Inspection Team: Jack Brunner, PRC Environmental Management, Inc. (PRC)
Kristine Kruk, PRC
Murat Tukel, Ohio Environmental Protection Agency

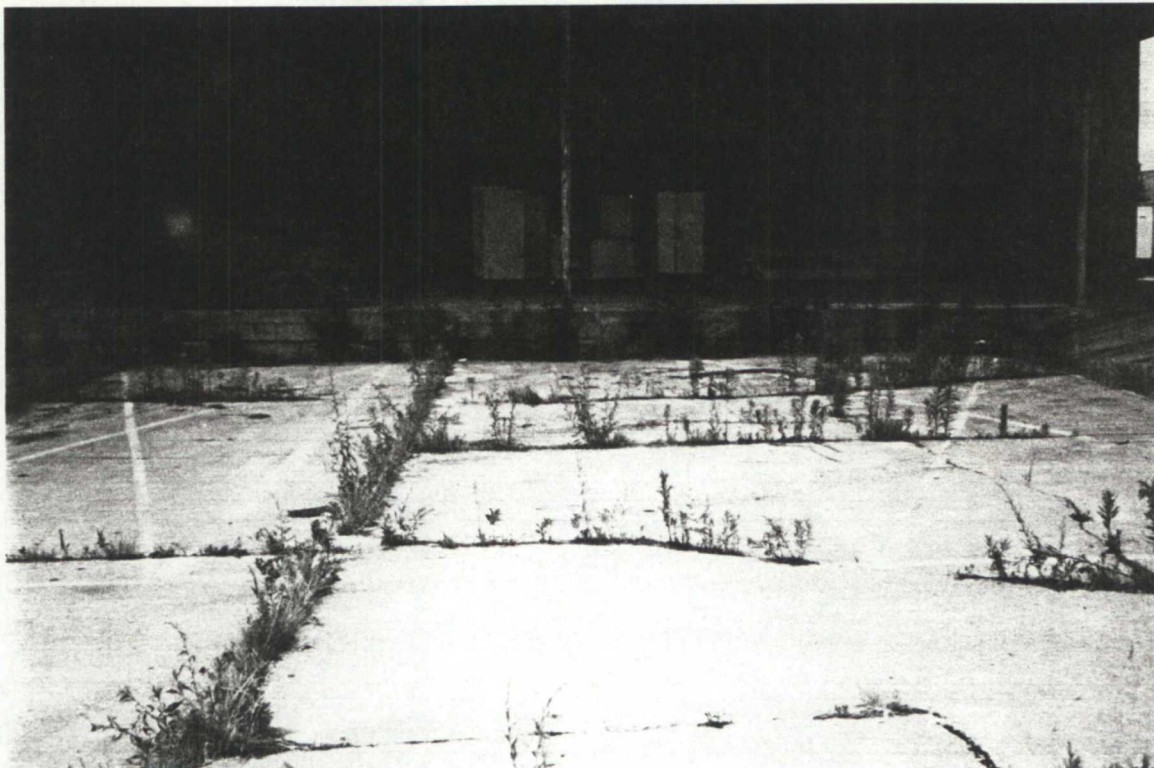
Photographer: Jack Brunner

Weather Conditions: Cloudy, drizzling, about 80°F

Summary of Activities: The visual site inspection (VSI) began at 10:45 a.m. with an introductory meeting. The inspection team explained the purpose of the VSI and the agenda for the visit. Facility representatives then discussed the facility's past and current operations, solid wastes generated, and release history. Facility representatives provided the inspection team with copies of requested documents.

The VSI tour began at 11:40 a.m. The inspection team noted that VW&R had vacated the facility. Vidmar, Inc., a furniture distributor, was leasing the facility and operating it as a warehouse only. PRC observed the Hazardous Waste CSA (SWMU 1) and the former locations of the Elementary Neutralization Unit (SWMU 2) and two outdoor product storage tank farms.

The tour concluded at 12:05 p.m., after which the inspection team held an exit meeting with facility representatives. The VSI was completed and the inspection team left the facility at 12:25 p.m.



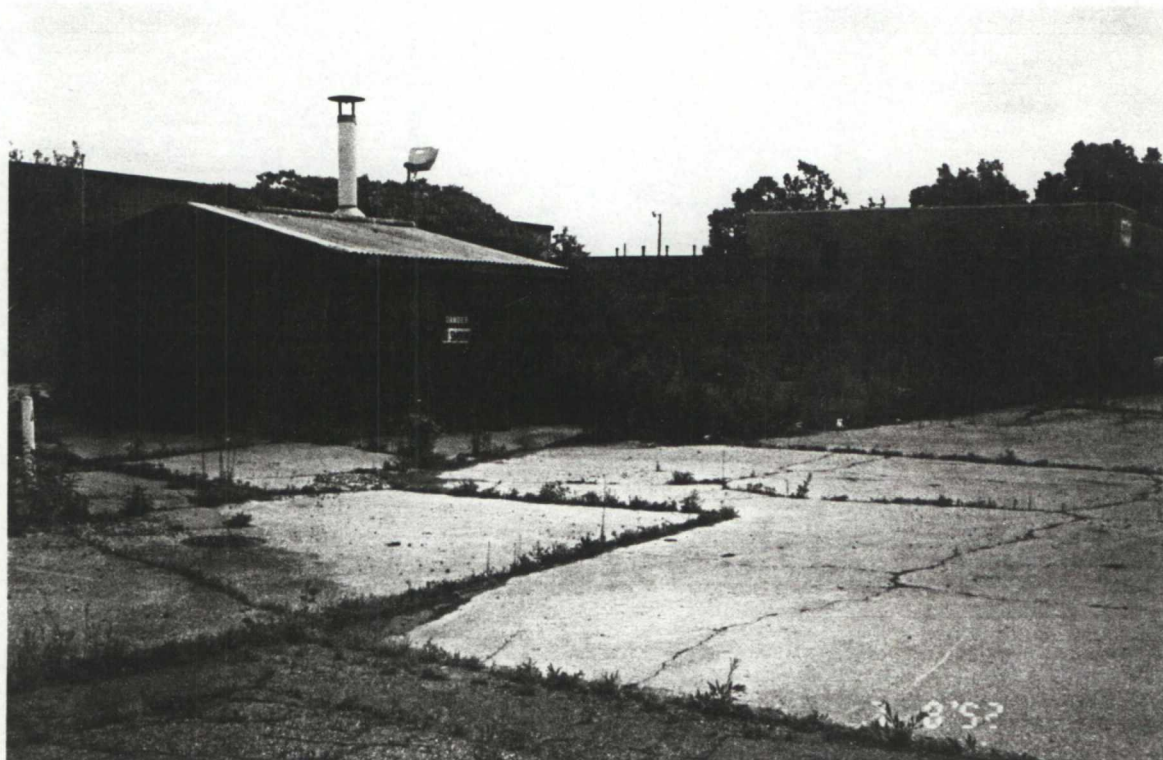
Photograph No. 1

Orientation: Southwest

Location: SWMU 1

Date: July 8, 1992

Description: Hazardous Waste Container Storage Area (CSA), is designated as the area between the yellow X's painted on the concrete



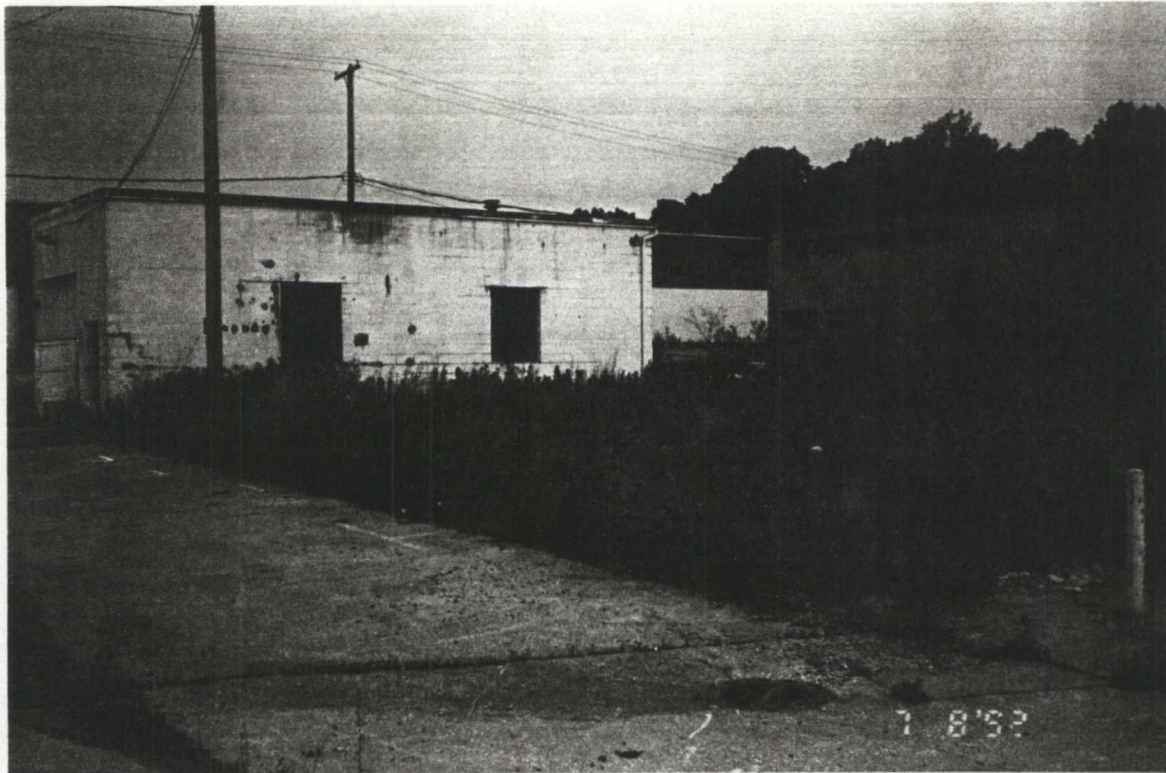
Photograph No. 2

Orientation: East

Location: NA

Date: July 8, 1992

Description: Solvent Repack Building (left) and former location of the Solvent Tank Farm



Photograph No. 3

Orientation: North

Description: Corrosive Repack Building (left) and former location of the Elementary
Neutralization Unit (SWMU 2) and caustic tank farm

Location: SWMU 2

Date: July 8, 1992

ATTACHMENT C
VISUAL SITE INSPECTION FIELD NOTES

(2)

Van Waters & Rogers B/VST
7/8/92

OND 071 107 791

10:45

PRC on-site; cloudy, drizzling; ~80°F

Jack Brunner

Kristin Kruk

Waiting to see James Hoyer, NW:R

Facility is located in an industrial area

Earl M. Jorgensen Company across
Richmond Road (steel distributor)

Joseph D. Shivers, Inc. (W)

B. B. Wood Products, Inc. (W); The Regent (W) East

Zellbach & Muhl Company (E)

11:00

Met w/James Hoyer

Russ Farney

(22)

- Distributor of industrial chemicals:

- Distributor of hazardous waste

- no manufacturing

10' x 30' waste storage area

- McWesson Chemical Company - regional only

- Tamsburg facility

11:10 - Marc Taki, DEPA arrives

- Currently, the facility is leased by

Vidmar, Inc. - a local

distributor -- "Lozy Boys"

- Distribution of mineral acids & alkalis

wastewater: residue from containers

may have been handled off-site after

or discharged directly to sewer

- ~20-25 employees during operations

(12)

- City sewer for sanitary wastewater.
- Facility was on Cleveland city water --
no wells on-site
- No documented releases except 1982
release of 410 gallons of material from
neutralization pit

Office

Warehouse - storage of products

- Neutral pit was outdoors - removed in 1989
- Both units were stopped operation in
1987

- Wastes were shipped off-site to
various SD facilities for
recycling or incineration

(13)

- all "product" was stored in containers
- Apparently ~~no~~ no air or H₂O permits
- Neutral pit was covered with flexible
liner
- Product/Sludge currently directed to
storm sewers -- ultimate disposition
not known
- 120 drums more @ CSA
- Follow-up information should be requested from
James Cooper
- Russ Karmay - Area Operations Manager
Tomburg, OH facility

(10)

- Closure has been completed & security approval from OCPA - system: 111-121A
Detail - activities are ongoing
closure was exhibited but not approved

11:40 Begin facility tour

Turn building @ corner
ready for inspection

- CSA - concrete area - not
buried - run-off would tend
to go in all directions
- several cracks in the concrete
- slope slightly north ~~W~~ E
- area is marked with yellow
paint

(11)

Photo #1 - CSA - underpass is
blocked

- Entire facility is sealed

- RR spur @ E end of facility --
info we not sure if this was
ever used -- dark house @
E end of warehouse almost but
it may have been used

- Gravel area @ N end of facility
was former location bulk storage
tank for product only -
fill building @ N end of
gravel area

- Fill Building is on concrete pad
w/ storm water sewer

(82)

- Valve structure near short fill Building - use unknown
- Additional gravel on top acid: waste tank area
- Dens were filled from tanks: washed waste waste fill building - was near gravity fed from neutralization pit
- Pit has been removed: area is filled w/ gravel/slag

Photo #2 - Short Fill Building: Four tank area

Photo #3 - Custer Fill Building: Four tank area / Neutral pit

(83)

- Custer tank area had a limestone/gravel base

- Base of solvent tank area is unknown

12:05 Finish party tour / wrap-up meeting

- All tanks above ground
 - liquid transfer into RE: clean and visit: tanks:
 - capacity
 - not constructed

- CSA - began in 1981

- Elmer not pit - before 1981 (1963?)

- Vidmar on site since June 1992

(80)

12.25 Fin. 4 VSI PRC all-site

~~Handwritten signature~~
7/8/92

(80)

~~Handwritten signature~~
7/8/92